

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Taking an integrated knowledge translation approach in research to develop the CONSORT-Equity 2017 reporting guideline: An observational study
AUTHORS	Jull, Janet; Graham, Ian; Kristjansson, Elizabeth; Moher, David; Petkovic, Jennifer; Yoganathan, Manosila; Tugwell, Peter; Welch, Vivian A.

VERSION 1 - REVIEW

REVIEWER	Jennifer Boyko Propel Centre for Population Health Impact
REVIEW RETURNED	19-Nov-2018

GENERAL COMMENTS	<p>I was very pleased to review and provide comments on this paper. I think it has potential for contributing to our understanding of the practice of IKT. However, I think major revisions are necessary to bring focus and clarity to the paper. I hope my comments are useful. I look forward to reviewing a revised version.</p> <p>Introduction</p> <p>First paragraph</p> <ul style="list-style-type: none">- It would be helpful to provide a definition of "reporting guidelines" prior to describing why they are important. While it may seem obvious, such a definition would strengthen the paper's focus from the outset.- Initial focus is rationale for reporting guidelines, then IKT as a solution to the knowledge production-use problem. A clearer description of the knowledge production-use problem is needed before jumping to IKT as a solution. <p>Overall logic</p> <ul style="list-style-type: none">- The introductory section does not develop logically. The paper starts with describing what reporting guidelines are and then quickly moves to describing IKT.- A more concise flow might be: There is waste in research --> reporting guidelines can help reduce waste --> IKT can help strengthen the use of reporting guidelines --> the experience using an IKT approach for developing the CONSORT-Equity 2017 contributes new insight about how to do so.- The remainder of the background can then discuss these components in more detail in order to provide sufficient rationale for the study. Within this background, it would be helpful to note examples of other reporting guidelines.
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Purpose and objectives

- Several different statements are made in the background about what the objectives of the paper are (e.g., describe the integrated KT approach designed to engage potential guideline knowledge users with researchers ... describe the process designed to engage a group of knowledge users and researchers, who were all interested in better guidance for reporting of randomized controlled trials for health equity ... establish a knowledge base that knowledge users and researchers consider relevant, useful and applicable ... summarize methods used for engagement of reporting guideline knowledge users with researchers ... report on the perceptions, challenges and strengths in the use of an integrated KT approach for the development of CONSORT-Equity 2017).

- A clear statement about the overall purpose of the paper is needed to bring the paper into focus. Further, rationale for why the paper is needed should be provided (e.g., there is a gap in knowledge about how to apply an IKT approach in research).

Methods

- This paper is about use of IKT in a mixed-methods guideline development study. While background about the methods used to develop the guideline are important context (i.e., first paragraph of methods), it may be more effective to describe the IKT approach in the methods. The results could then focus on the survey about experience with IKT, which currently seems to be an add-on. The methods should also include the survey.

- Positioning of patient and public involvement in methods section does not seem to fit. The end part of this section reads like an acknowledgement. This section needs to be re-written with more methodological grounding not general statements. For example, how were patients / public involved in the advisory board? I would suggest integrating the content of this section into the previous methods section. Further, some content is repetitive.

Results

- As it stands now, there are no methods linked to the results provided. Where did the “two essential stages and associated sub-steps in the conduct of the mixed-method study” come from? Are these based on the experience of the team? Did the survey findings feed into these?

- The section on the “Perceptions on the integrated KT approach and impact on co-creation of knowledge” seems to address rationale, process and results. The content in this section could be better positioned and integrated elsewhere in the paper (e.g., background, methods, results).

Discussion

- Since the paper follows a traditional research paper format, the authors might consider adding more of a discussion. The current section “Challenges and strengths with an integrated KT approach with guideline development” could form the basis of the discussion, however, it would need to be enhanced with discussion relative to the IKT literature and what this study adds.

Other

- The literature related to IKT has grown over the past 5-7 years. Some of this literature attempts to define IKT relative to other participatory methods. What makes the approach used in this

	<p>study IKT vs. participatory research? At a minimum, the paper should acknowledge differences between IKT used in this study and other approaches.</p> <ul style="list-style-type: none"> - Was the IKT approach intentional or was the lens put on after? It is not clear whether the process (as described) was designed a priori or if IKT was mapped on after. It would be helpful to be explicit about this in background or elsewhere when revising the paper - Why list the advisory research-knowledge user board as authors? Seems they should be authors of the guideline not the methods paper. This is something for the authors to think about. - It is not clear why the term “advisory board-researcher collaboration” is used. How is this different from other research teams that collaborate with an advisory board? What is unique about this approach and how does it support IKT specifically? - Some minor editorial revisions needed. The authors are encouraged to carefully review the paper for consistent use of acronyms, more concise writing, and repetitive content.
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REVIEWER	Dr Tiffany Conroy Flinders University, Australia
REVIEW RETURNED	05-Dec-2018

GENERAL COMMENTS	<p>Thank you for the opportunity to review this article.</p> <p>The use of an integrated KT methodology has broad appeal and your paper has the potential to be a 'blue print' for others to use when considering how to develop guidelines. However, more detail about the methods used and the provision of examples would add greater clarity and provide improved guidance.</p> <p>The inclusion of the evaluation from the members of the advisory board-researcher collaboration, could be interesting but much more detail regarding the methods is required to be able to evaluate the rigour and validity of these results.</p> <p>I suggest the paper focus on the integrated KT methodology from the beginning, as introducing reporting guidelines as the first topic is potentially confusing, particularly as these are not explained until later in the paper. A brief description of what a reporting guideline is, such as 'a list of important points readers need to know' early in the paper would be useful. Health equity is also discussed in detail later in the paper, and this could be moved to the introduction/background for greater clarity.</p> <p>The terms of reference table does not add much novel information and could be replaced by a table indicating the occupation/contribution of the 38 members of collaboration and their geographical locations.</p> <p>Please give the full text explanation for abbreviations the first time the abbreviation is used, even when it is a well-known one such as CONSORT.</p> <p>The methods were guided by a protocol, is that correct? There is a mention of guidance here, is this the protocol? Each stage was 'governed' by a group of researchers, what did this involve?</p> <p>Please provide examples of the participatory methods used. Was the survey completed after the reporting guideline was created/complete? Are there examples of the content related support etc. provided by the patients and patient organisations?</p> <p>Figure 1 does not appear to reflect the stages and sub-steps described.</p>
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	<p>Some of the results appear to be methods and again examples would add clarity, such as how were others who shared concerns 'engaged' and how were board members defined and recruited. Was the interdisciplinary team exclusively composed of researchers?</p> <p>Are there examples for how the advisory board created opportunities to expand and explore?</p> <p>A description of the efforts made to accommodate participation would also be helpful for future users of this methodology.</p> <p>A table including all of the survey questions and the types of response would add clarity (was it a free text option or dichotomous/Likert?), and the details of the participants, if known should also be included here. The data requires n and % for rigour and statements such as 'most' need to be qualified. If there were free text responses how were these analysed?</p> <p>The challenges and strengths are explored but how were these determined? The term 'work' is not self explanatory, does it refer to workload?</p> <p>The relationships developed during the integrated KT process are a valuable and hopefully enduring deliverable, how do you envisage these may be leveraged and nurtured in the future?</p> <p>The conclusion refers to a 'previously developed collaborative framework", which framework is being referred to here?</p> <p>As mentioned, your work has the potential to provide guidance for other researchers and is of personal interest to me. My comments and suggestions are intended to enable your work to be replicated as I feel it provides a model for collaboration and co creation.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer(s)' Comments to Author:

Reviewer: 1

Reviewer Name: Jennifer Boyko

Institution and Country: Propel Centre for Population Health Impact

Please state any competing interests or state 'None declared': None

Please leave your comments for the authors below

I was very pleased to review and provide comments on this paper. I think it has potential for contributing to our understanding of the practice of IKT. However, I think major revisions are necessary to bring focus and clarity to the paper. I hope my comments are useful. I look forward to reviewing a revised version.

Introduction

Reviewer: 1

First paragraph

- It would be helpful to provide a definition of “reporting guidelines” prior to describing why they are important. While it may seem obvious, such a definition would strengthen the paper’s focus from the outset.

Author response: Thank you – the paper now has a definition for reporting guidelines included upfront (p. 5): “Defined as a tool for use by health researchers to structure manuscript writing, reporting guidelines consist of...”

Reviewer: 1

- Initial focus is rationale for reporting guidelines, then IKT as a solution to the knowledge production-use problem. A clearer description of the knowledge production-use problem is needed before jumping to IKT as a solution.

Author response: Thank you – and we agree that a description of the knowledge production problem is needed before introducing KT as a solution. The paper has been re-organized with the section describing KT and how understandings of the knowledge production problem led to the need for integrated KT to be earlier in the paper – before introducing integrated KT. Please see page 7: “Initially, know- do gaps (for example, uptake of reporting guidelines) were considered simply a problem of knowledge transfer (19) and with end users only needing to become aware of the knowledge and they would implement it. Understandings of the cause of know-do gaps continue to evolve, and now these gaps are considered to be more of a knowledge production problem...”.

Reviewer: 1

Overall logic

- The introductory section does not develop logically. The paper starts with describing what reporting guidelines are and then quickly moves to describing IKT.

- A more concise flow might be: There is waste in research --> reporting guidelines can help reduce waste --> IKT can help strengthen the use of reporting guidelines --> the experience using an IKT approach for developing the CONSORT-Equity 2017 contributes new insight about how to do so.

- The remainder of the background can then discuss these components in more detail in order to provide sufficient rationale for the study. Within this background, it would be helpful to note examples of other reporting guidelines.

Author response: Thank you – the paper has been reorganized for overall logic and your suggestions helped a great deal. We have also provided access to a resource (the EQUATOR network, Centre for Journalism at the Ottawa Hospital Research Institute) that are sources of examples of other reporting guidelines (see paper starting on page 5).

Reviewer: 1

Purpose and objectives

- Several different statements are made in the background about what the objectives of the paper are (e.g., describe the integrated KT approach designed to engage potential guideline knowledge users with researchers ... describe the process designed to engage a group of knowledge users and researchers, who were all interested in better guidance for reporting of randomized controlled trials for health equity ... establish a knowledge base that knowledge users and researchers consider relevant, useful and applicable ... summarize methods used for engagement of reporting guideline knowledge

users with researchers ... report on the perceptions, challenges and strengths in the use of an integrated KT approach for the development of CONSORT-Equity 2017).

- A clear statement about the overall purpose of the paper is needed to bring the paper into focus. Further, rationale for why the paper is needed should be provided (e.g., there is a gap in knowledge about how to apply an IKT approach in research).

Author response: Thank you, and we agree. The restructured paper Introduction section of the paper includes a clear rationale and aim. See revisions in the Abstract and in main body of the paper, with the objective stated at the end of the Introduction section on p. 8:

“The objective of this paper is to describe the use of an integrated KT approach in the development of the CONSORT-Equity 2017 reporting guideline and team members’ perceptions of the integrated KT process.”

Reviewer: 1

Methods

- This paper is about use of IKT in a mixed-methods guideline development study. While background about the methods used to develop the guideline are important context (i.e., first paragraph of methods), it may be more effective to describe the IKT approach in the methods. The results could then focus on the survey about experience with IKT, which currently seems to be an add-on. The methods should also include the survey.

Author response: Agreed – and we have conducted a significant restructuring of the paper that includes moving description of the IKT approach to the methods with the survey: “We adopted an observational study design involving participant observation supplemented with a survey of team members to produce a description of team processes and experiences with the structured integrated KT approach used to develop the CONSORT-Equity 2017 reporting guideline (6).”

Reviewer: 1

- Positioning of patient and public involvement in methods section does not seem to fit. The end part of this section reads like an acknowledgement. This section needs to be re-written with more methodological grounding not general statements. For example, how were patients / public involved in the advisory board? I would suggest integrating the content of this section into the previous methods section. Further, some content is repetitive.

Author response: Thank you and agreed, in the previous paper the positioning of the patient and public involvement did not fit well into the methods section. The section seems to be a requirement of the journal for the Methods section so we have made revisions to address the issues you have identified. The section about patient and public involvement has a new sub-heading and is moved into the Methods section on page 10: “Knowledge user engagement that included patients and members of the public”. As well, the section text has been revised and that begins: “Knowledge users have been involved in the design, conduct and reporting of the work reported in this manuscript to develop

CONSORT-Equity 2017, and are also identified as co-authors or acknowledged on the work presented here. The membership and roles of knowledge users who include patients and members of patient organizations are reported in the study protocol and final product documents (6, 16, 17, 27).”

We agree that a re-write with more methodological statements were needed and so have clearly identified how and where patient and public involvement are included in the work and the details on their involvement are defined. There is now a table (in author contributions section) that reports the GRIPP (Guidance for Reporting Involvement of Patients and the Public) 2 Short Form Reporting checklist for study conduct. As well, we cite previously published papers that provide detail on the roles of members (including patients) in the study.

Throughout the paper, there have been edits for repetitive content about how patients/public were involved in the study. The statements about involvement of how patients/public were involved in the advisory board have been edited for clarity. For example: “An Advisory Board formed. Collaboration with knowledge user groups during the development of CONSORT-Equity 2017 was identified as an important feature of the study by the research team, and with a decision to form an advisory board of intended users of the reporting guideline. The importance of collaboration with knowledge user groups during the development of CONSORT-Equity 2017 led to the deliberate defining of roles and recruitment of knowledge users to the advisory board: journal editors, trialists, bioethicists, patients and members of the public, clinicians, systematic review authors, policy makers, and funders.” (p. 12). As well, the Table 1 Terms of Reference detail agreements made with the advisory board members.

Reviewer: 1

Results

- As it stands now, there are no methods linked to the results provided. Where did the “two essential stages and associated sub-steps in the conduct of the mixed-method study” come from? Are these based on the experience of the team? Did the survey findings feed into these?

Author response: We agree that the way the information is presented was confusing and have made edits to link the methods to result and so 1) explain the integrated KT approach in the methods section so that it is clear that a previously developed framework was used to structure the integrated KT approach and 2) explain how the survey was used to assess the experience of the team members with the integrated KT approach: “We adopted an observational study design involving participant observation supplemented with a survey of team members to produce a description of team processes and experiences with the structured integrated KT approach used to develop the CONSORT-Equity 2017 reporting guideline (6).” (p. 8-9).

Please see the revised Methods section, p. 8-11.

Reviewer: 1

- The section on the “Perceptions on the integrated KT approach and impact on co-creation of knowledge” seems to address rationale, process and results. The content in this section could be better positioned and integrated elsewhere in the paper (e.g., background, methods, results).

Author response: Thank you – the section you have referred to has been revised and integrated into the Discussion (see p. 23-24): “Perceptions of the integrated KT approach and impacts on co-creation of knowledge”.

Reviewer: 1

Discussion

- Since the paper follows a traditional research paper format, the authors might consider adding more of a discussion. The current section “Challenges and strengths with an integrated KT approach with guideline development” could form the basis of the discussion, however, it would need to be enhanced with discussion relative to the IKT literature and what this study adds.

Author response: We have expanded the Discussion section and include discussion about the perceptions of the integrated KT approach and impact on co-creation of knowledge (p.23-24) (see response to previous comment) and have revised the section on limitations and strengths of an integrated KT approach to guideline development.

Reviewer: 1

Other

- The literature related to IKT has grown over the past 5-7 years. Some of this literature attempts to define IKT relative to other participatory methods. What makes the approach used in this study IKT vs. participatory research? At a minimum, the paper should acknowledge differences between IKT used in this study and other approaches.

Author response: Thank you - we have expanded the Discussion and explain how the integrated KT approach was selected as the most appropriate approach for our study – see p. 24 and that begins as follows:

“Many options exist to facilitate collaboration within research partnerships and that foster democratic approaches to knowledge creation (22, 39-41). Integrated KT was identified as appropriate for our study, as it focuses on the co-creation of knowledge with practical applications (22).”

Reviewer: 1

- Was the IKT approach intentional or was the lens put on after? It is not clear whether the process (as described) was designed a priori or if IKT was mapped on after. It would be helpful to be explicit about this in background or elsewhere when revising the paper.

Author response: Yes, the integrated KT approach was planned for at the start of the study. The citation to the published protocol is included, and the deliberate selection of the integrated KT approach at the start of the study is made explicit in the Introduction: “The objective of this paper is to

describe the use of an integrated KT approach in the development of the CONSORT-Equity 2017 reporting guideline and team members' perceptions of the integrated KT process.”(p.8).

As well, the plan for the integrated KT approach is made explicit in the introduction: “Given the presumed benefits of an integrated KT approach and the desire to maximize the quality, usefulness and use of the reporting guideline, the group decided to adopt an integrated KT approach to the development of the CONSORT- Equity 2017 reporting guideline so as to optimize the co-creation of the guideline.” p.8.

As well, the publication of the plan for integrated KT is referenced in the Methods section: “We adopted an observational study design involving participant observation supplemented with a survey of team members to produce a description of team processes and experiences with the structured integrated KT approach used to develop the CONSORT-Equity 2017 reporting guideline (6). The research stages followed in developing the reporting guideline are described in detail in a published protocol (6).”

Reviewer: 1

- Why list the advisory research-knowledge user board as authors? Seems they should be authors of the guideline not the methods paper. This is something for the authors to think about.

Author response: The advisory board-researcher group members who are listed as coauthors have met pre-defined authorship criteria and this is explained in the paper and in the terms of reference document (Table 1) that explains the role of the advisory board members and the requirements of team members to meet authorship guidelines on publications.

Reviewer: 1

- It is not clear why the term “advisory board-researcher collaboration” is used. How is this different from other research teams that collaborate with an advisory board? What is unique about this approach and how does it support IKT specifically?

Author response: The term “advisory board-researcher collaboration” is used to explain that there was a deliberate effort made to develop and maintain collaboration between members and within the study processes – the entire group was a part of the study governance. We use the term very deliberately and to be explicit about the study relationships and their part in the conduct of an integrated KT approach – however, we agree that it is a cumbersome term so have defined and use the term “team” to refer to this group in the paper and that is defined in the Abstract and also in the Introduction of the main text:

““CONSORT-Equity 2017”

Wishing to produce the highest quality reporting guideline and recognizing that the uptake of the resulting reporting guideline would be critical to improving the reporting of future trials(17), between 2015 and 2017, an interdisciplinary group of knowledge users and researchers came together as an advisory board-researcher members team (“the team”) to develop an equity extension of CONSORT, “CONSORT-Equity 2017” (6). “(p.8).

As well, see revisions for additional clarity with statements in the paper, for instance on page 8 and that explain the rationale for integrated KT that involves engagement with knowledge users and the potential benefits:

“Proposed as an approach to address the issues of knowledge production and application (20, 21), “integrated knowledge translation” (integrated KT) is also identified as an approach that is more likely to lead to the practical application of knowledge (19, 22) because knowledge users are involved in co-creating the research which means the findings are more likely to be useful, useable and used (20, 21).”.

While not being clear on the ways that other researchers work with advisory groups, in our paper we strive to emphasize the importance of the integrated KT approach to structure team processes that result in co-creation. We hope that our paper, with the reorganizations and edits, more clearly describes the use of an integrated KT approach in the development of the CONSORT-Equity 2017 reporting guideline and team members’ perceptions of the integrated KT process.

Reviewer: 1

- Some minor editorial revisions needed. The authors are encouraged to carefully review the paper for consistent use of acronyms, more concise writing, and repetitive content.

Author response: Thank you – the entire paper has been revised for consistent use of acronyms, concise writing and repetitive content.

Reviewer: 2

Reviewer Name: Dr Tiffany Conroy

Institution and Country: Flinders University, Australia

Please state any competing interests or state ‘None declared’: None declared

Please leave your comments for the authors below

Thank you for the opportunity to review this article.

The use of an integrated KT methodology has broad appeal and your paper has the potential to be a ‘blue print’ for others to use when considering how to develop guidelines. However, more detail about the methods used and the provision of examples would add greater clarity and provide improved guidance.

The inclusion of the evaluation from the members of the advisory board-researcher collaboration, could be interesting but much more detail regarding the methods is required to be able to evaluate the rigour and validity of these results.

Reviewer: 2

I suggest the paper focus on the integrated KT methodology from the beginning, as introducing reporting guidelines as the first topic is potentially confusing, particularly as these are not explained until later in the paper.

Author response: Thank you for this comment - it was very helpful and we appreciate the suggestion to focus on the integrated KT approach. We have reorganized the paper and that moves the integrated KT approach up in the paper and hope that this meets your expectations and the expectations of reviewer #1 as well.

Reviewer: 2

A brief description of what a reporting guideline is, such as 'a list of important points readers need to know' early in the paper would be useful. Health equity is also discussed in detail later in the paper, and this could be moved to the introduction/background for greater clarity.

Author response: We agree: the description as well as the organization of the paper have been revised for additional clarity - and as described for reviewer #1.

Reviewer: 2

The terms of reference table does not add much novel information and could be replaced by a table indicating the occupation/contribution of the 38 members of collaboration and their geographical locations.

Author response: Thank you for this comment. We reflected on maintaining the inclusion of the Table with the terms of reference (Table 1) and decided to keep it in as it answers some of the questions posed by reviewer #1 and also noted later in this document. The terms of reference document was useful in our work and for this paper facilitates communication of the strategies used to engage with and structure the relationships with the interdisciplinary advisory board members, and also explains how and why advisory board members are coauthors on this paper.

We have provided references and details on the advisory board-researcher collaboration that are reported in other documents.

Reviewer: 2

Please give the full text explanation for abbreviations the first time the abbreviation is used, even when it is a well-known one such as CONSORT.

Author response: Thank you for picking up this error – the revised version of the paper has the acronym spelled out for the first time in the abstract and main text.

Reviewer: 2

The methods were guided by a protocol, is that correct? There is a mention of guidance here, is this the protocol? Each stage was 'governed' by a group of researchers, what did this involve?

Author response: The methods were guided by a published protocol and that is explicitly identified and cited throughout the paper.

The original Methods section has been revised and terms are better explained, and the term "guidance" that was confusing is now removed. The Methods section now describes the study process as follows and the protocol is cited:

"We adopted an observational study design involving participant observation supplemented with a survey of team members to produce a description of team processes and experiences with the structured integrated KT approach used to develop the CONSORT-Equity 2017 reporting guideline (6)."

We describe the use of a previously developed framework in the Method section (p.8-11): "The processes to develop CONSORT-Equity 2017 were structured by a framework that depicts integrated KT (24)."

And – we conclude the Methods section with a rationale for why use of the framework was identified as important: "The collaborative framework describes structured processes of negotiation within the study partnerships and that engages knowledge users as full partners with researchers (24). As engagement of knowledge users throughout the development of CONSORT-Equity 2017 was a priority, the framework was selected as appropriate for use. We describe the study processes of CONSORT-Equity 2017 in relation to the framework that depicts integrated KT. "

The integrated KT approach and the use of the protocol should be more apparent now in the re-organized paper (see also Results, p. 13 and in Table 2): "The facilitators (JJ, VW) worked to make plans and schedule events that created opportunities for the advisory board-researcher groups, referred to as "the team", to function in a partnership to promote inclusion and respect for a multiplicity of views in the CONSORT-Equity 2017 study. The engagement between the members of the team created opportunities to explore concepts related to health equity, and are reflected in products (for example, a tool to identify when a randomized trial is health-equity relevant (17)). Finally, the team members defined and agreed upon an agenda for the study and that is published in a protocol (6)."

Thank you for the helpful comments – they contributed to significantly revising the paper for clarity.

Reviewer: 2

Please provide examples of the participatory methods used. Was the survey completed after the reporting guideline was created/complete? Are there examples of the content related support etc. provided by the patients and patient organisations? Figure 1 does not appear to reflect the stages and sub-steps described.

Author response:

The Methods section describes the integrated KT approach and the framework that was used to structure the study processes and the steps in the study (conduct of the study followed by the survey): “The collaborative framework describes structured processes of negotiation within the study partnerships and that engages knowledge users as full partners with researchers (24). As engagement of knowledge users throughout the development of CONSORT-Equity 2017 was a priority, the framework was selected as appropriate for use. We describe the study processes of CONSORT-Equity 2017 in relation to the framework that depicts integrated KT.

We used the previously developed framework to guide and organize documented observations and events to describe the development of CONSORT-Equity 2017 (25). At the completion of the study, team members were surveyed about their perceptions of the integrated KT approach.”(p.9)

Examples of participatory methods used are provided in the details of the Results section in Table 2 and in text:

“The development of CONSORT-Equity 2017 used an integrated KT approach to structure replicable steps: to conduct research in a collaborative manner that uses consensus-building methods and involves co-creation of knowledge (24); and, to develop a reporting guideline for equity (CONSORT-Equity 2017). The process for co-creating the reporting guideline involved two stages: 1) establishing guiding features for co-creation, and 2) engaging knowledge users and researchers (the team) in research actions that supported the co-creation of the reporting guideline.” (p. 11).

Thank you for the comment about Figure 1. The graphic has been revised and reviewed to ensure alignment with the text. As well, we have included the preparation phase of the work so that each part of the integrated KT approach is depicted.

Reviewer: 2

Some of the results appear to be methods and again examples would add clarity, such as how were others who shared concerns ‘engaged’ and how were board members defined and recruited. Was the interdisciplinary team exclusively composed of researchers?

Author response: Thank you for this comment. We have revised the Methods section with a clear focus to describe the methods that align with the aim of the paper and that begin:

“We adopted an observational study design involving participant observation supplemented with a survey of team members to produce a description of team processes and experiences with the structured integrated KT approach used to develop the CONSORT-Equity 2017 reporting guideline (6).” (p.8).

We agree, in the previous version of the paper there was confusion with descriptions of methods and results. As the Methods and Results sections have been revised, the development of the advisory board as well as other steps should now be clearly described both in Table 2 and in the text of the Results section.

In response to the question about whether the interdisciplinary team is exclusively composed of researchers, revisions have included clear identification of members, for example:

“Two researcher members (VW, PT) recognized the interest and need to extend CONSORT for equity. Next, these researcher members identified other individuals (funders, journal editors, researchers) who held relevant knowledge and who shared concerns about equity in health systems, and so relationships were built among these individuals to form a rudimentary research team.” (p.12)

Reviewer: 2

Are there examples for how the advisory board created opportunities to expand and explore?

A description of the efforts made to accommodate participation would also be helpful for future users of this methodology.

Author response:

Thank you for pointing out the vague descriptions that were in the previous version of this paper and edits have been made for clarity and examples have been used in Table 2 and the text to explain events, for example: “The engagement between the members of the team created opportunities to explore concepts related to health equity, and are reflected in products (for example, a tool to identify when a randomized trial is health-equity relevant (17)). Finally, the team members defined and agreed upon an agenda for the study and that is published in a protocol (6).” (p. 13).

We agree that details on efforts to accommodate participation may be helpful to others interested in using an integrated KT approach, and for this reason we have left in the Terms of Reference document (Table 1) and that describe details such as roles, workload, what can be expected, communication et cetera. As well, Table 1 has details on the study processes and how the advisory board was engaged. There are additional details on strategies to engage the advisory board in the Discussion section starting with the paragraph: “Many options exist to facilitate collaboration within research partnerships and that foster democratic approaches to knowledge creation (22, 39-41).” (p.24)

We hope that this is helpful to readers and aim to encourage partnerships with knowledge users that are open to negotiation and ways to accommodate participation, as every partnership will be unique.

Reviewer: 2

A table including all of the survey questions and the types of response would add clarity (was it a free text option or dichotomous/Likert?), and the details of the participants, if known should also be included here. The data requires n and % for rigour and statements such as ‘most’ need to be qualified. If there were free text responses how were these analysed?

Author response: Thank you for this comment as it adds clarity to our work. The information you are asking for is in Tables 3 and 4 and with your requests for information included and qualified. The

details on the analysis are included in the revised Methods section and reported in the Results as well.

Reviewer: 2

The challenges and strengths are explored but how were these determined? The term 'work' is not self explanatory, does it refer to workload?

Author response: The challenges and strengths (p. 25) are now revised and labelled as "limitations and strengths" and these are points that were identified in the survey and then elaborated on by the facilitators of the process and reviewed by co-authors who are team members.

The term work has been clarified throughout the paper and in the limitations and strengths section is defined: "work roles (outside of CONSORT-Equity)".(p.26)

Reviewer: 2

The relationships developed during the integrated KT process are a valuable and hopefully enduring deliverable, how do you envisage these may be leveraged and nurtured in the future?

Author response: Thank you for these positive comments and yes, the relationship shall hopefully be enduring. In our paper we describe (in Table 2) the plans for 'road testing' of the CONSORT-Equity reporting guideline as one planned activity that is underway.

Reviewer: 2

The conclusion refers to a 'previously developed collaborative framework", which framework is being referred to here?

Author response: As the paper has been significantly revised the conclusion has also been revised for clarity and alignment with the rest of the paper. The sentence you have referred to has been changed as we agree it was confusing as it was written and instead the section now begins: "An integrated KT approach was used to structure the engagement of knowledge users with researchers in mixed-method study to develop a reporting guideline, CONSORT-Equity 2017."(p.27).

Reviewer: 2

As mentioned, your work has the potential to provide guidance for other researchers and is of personal interest to me. My comments and suggestions are intended to enable your work to be replicated as I feel it provides a model for collaboration and co creation.

Author response: Thank you for your review and comments – they are appreciated!

VERSION 2 – REVIEW

REVIEWER	Tiffany Conroy Flinders University Australia
REVIEW RETURNED	15-Mar-2019

GENERAL COMMENTS	<p>Thank you for the opportunity to review to revised edition of this paper. Thank you also for the considerable effort you have put into addressing the reviewer comments and suggestions. The process described in the paper is now much easier to follow. There are still a few areas where greater clarity and consistency are required.</p> <p>Methods</p> <p>The tense used varies from present to past. The paragraphs relating to Patients and Public Involvement are confusing. Patients are described as being both distinct participants and as part of the knowledge user group. The sentence beginning “Patient priorities, experiences...” is hard to follow, how did their preferences describe the research processes?</p> <p>Results</p> <p>There are many different ‘groups’ described in the text and Table 1, such as the knowledge user group, researchers, the research team, the advisory board, the research group, the working group, the core research team, researcher members, the researcher group and the advisory board-researchers group (the team). Sometimes different terms seem to refer to the same group. A diagram indicating each group and how they are linked or participated in the project would be helpful. How did the ‘researcher members’ recognise ‘the interest’ and whose interest did they recognise? The sentence “The use of participatory methods were used to promote consensus building, and to result in the co-creation of knowledge during the guideline reporting development” is unclear. What are the studies referred to in the sentence “Stage two consisted of five steps during which studies for consensus-based reporting guidelines were conducted”?</p> <p>It would add clarity to identify via references in the text the publications referred to in the sentence “For the CONSORT-Equity 2017 study there are publications (see Table 2) that document descriptions of the particular study processes, and that include identification of who and how the team members were involved.” It is sometimes confusing which parts of the paper refer to the guideline development process and which refer to the ‘study’ which I assume is the exploration of the IKT, that is, the CONSORT-Equity 2017 study?</p> <p>How were the quotes that are reported as part of the Likert data obtained or are these obtained from the open ended questions and ‘themed’ to the Likert questions? What were the ‘relevant open-ended questions’ that corresponded?</p> <p>The following sentence seems to refer to Table 4 “Frequency counts of the type of responses were recorded and are reported in Table 3 with example quotes” .</p>
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	<p>The statement “During the CONSORT-Equity 2017 study, team members were found to be more engaged in particular activities in relation to their knowledge, and/or in relation to life events.” requires support or an example to clarify. I hope my comments are useful.</p>
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VERSION 2 – AUTHOR RESPONSE

<p>Reviewer #1</p>	
<p>Thank you for the opportunity to review to revised edition of this paper. Thank you also for the considerable effort you have put into addressing the reviewer comments and suggestions.</p> <p>The process described in the paper is now much easier to follow.</p> <p>There are still a few areas where greater clarity and consistency are required.</p>	<p>Thank you for these comments.</p>
<p>Methods</p> <p>The tense used varies from present to past.</p> <p>The paragraphs relating to Patients and Public Involvement are confusing. Patients are described as being both distinct participants and as part of the knowledge user group. The sentence beginning “Patient priorities, experiences...”is hard to follow, how did their preferences describe the research processes?</p>	<p>We have reviewed the entire paper for tense and other grammar issues.</p> <p>We agree, and have made revisions for clarity about the role of Patients as part of the team that conducted the study to develop CONSORT-Equity 2017. We have also revised the entire paper to be clear on the roles of participants.</p> <p>The paragraph on Patients and Public Involvement should now be clear with revisions to the entire paragraph that includes the sentence identified by the reviewer, and starts as follows:</p> <p>“Patients (that is, patients and members of the public) were members of the team involved in the design, conduct and reporting of the work to develop CONSORT-Equity 2017. As patients were members of the CONSORT-Equity 2017 team, patient priorities, experience, and preferences informed the development of research questions, design of the study, and the outcome measures that are reported in this document to describe the research processes of CONSORT-Equity 2017.”</p>
<p>Results</p> <p>There are many different ‘groups’ described in the text and Table 1, such as the knowledge</p>	<p>Thank you for this comment and we agree that different terms to describe the participants was</p>

<p>user group, researchers, the research team, the advisory board, the research group, the working group, the core research team, researcher members, the researcher group and the advisory board-researchers group (the team). Sometimes different terms seem to refer to the same group. A diagram indicating each group and how they are linked or participated in the project would be helpful.</p>	<p>an issue, and this had been addressed in the text and in the tables.</p> <p>We have removed the term “groups”. Instead, we have made revisions to ensure consistent terms are applied and have focused on clearly identifying who was involved to explain how an integrated KT approach was used to engage knowledge users with researchers as a team, to develop the CONSORT-Equity 2017 reporting guideline.</p> <p>The figure (Figure 1) has the different participants (researchers, knowledge users, advisory board) identified in relation to one another and we have cited the figure in the text of the paper at the start of the Results section.</p>
<p>How did the ‘researcher members’ recognise ‘the interest’ and whose interest did they recognise?</p>	<p>Thank you for your careful review. We have revised the sentence to be more explicit:</p> <p>“Initiating a process to engage researchers with potential knowledge users in the development of CONSORT-Equity 2017 involved discussions with individuals and meetings: 1) determining if and how knowledge users’ interests and concerns align with those of researchers; 2) building relationships among knowledge users and researchers; 3) defining the parameters of a team relationship for knowledge users and researchers to find common ground and collaborate on a project to develop CONSORT-Equity 2017 (25).”</p>
<p>The sentence “The use of participatory methods were used to promote consensus building, and to result in the co-creation of knowledge during the guideline reporting development” is unclear.</p>	<p>Thank you for pointing out the lack of clarity and the sentence is intended to provide an overview of what was done to promote the collaborative process among team members who developed CONSORT-Equity 2017. We agree that more explicit description is needed and have revised the sentence to identify what is meant by “the use of participatory methods”:</p> <p>“The use of participatory methods in the form of facilitated on-line and in-person team meetings were used to promote consensus building among team members. The result of the team meetings was the co-creation of knowledge in the form of a reporting guideline.”</p>
<p>What are the studies referred to in the sentence “Stage two consisted of five steps during which</p>	<p>The sentence has been removed, and the introductory sentence to the paragraph and</p>

<p>studies for consensus-based reporting guidelines were conducted”?</p>	<p>section now identifies how the two stages of the reporting guideline development relate to one another:</p> <p>“The agreed-upon guiding features of the research approach (Stage 1) were used to structure the (Stage 2) multi-phase CONSORT-Equity 2017 study to accomplish objectives and create products over a two-year timeframe (Table 2).” The remainder of the paragraph is now clear.</p>
<p>It would add clarity to identify via references in the text the publications referred to in the sentence “For the CONSORT-Equity 2017 study there are publications (see Table 2) that document descriptions of the particular study processes, and that include identification of who and how the team members were involved.”</p>	<p>The references have been added to the sentence so that it is easier for the reader to locate the items.</p> <p>Thank you for this suggestion.</p>
<p>It is sometimes confusing which parts of the paper refer to the guideline development process and which refer to the ‘study’ which I assume is the exploration of the IKT, that is, the CONSORT-Equity 2017 study?</p>	<p>Agreed. We have reviewed the paper to address any potential confusion, and to ensure that the term “study” refers to the integrated KT and the CONSORT-Equity 2017.</p>
<p>How were the quotes that are reported as part of the Likert data obtained or are these obtained from the open-ended questions and ‘themed’ to the Likert questions?</p> <p>What were the ‘relevant open-ended questions’ that corresponded?</p>	<p>Thank you for catching this – the Likert questions included the option for an open comment. The detail is added to the methods and results section to explain why there are illustrative quotes for the Likert questions.</p> <p>See comments above – the table 3 heading now reads as follows: “Illustrative quote from open-ended comments”</p>
<p>The following sentence seems to refer to Table 4 “Frequency counts of the type of responses were recorded and are reported in Table 3 with example quotes”.</p>	<p>Thank you – the intention was to refer to Table 4. The text is updated to refer to the correct table.</p>
<p>The statement “During the CONSORT-Equity 2017 study, team members were found to be more engaged in particular activities in relation to their knowledge, and/or in relation to life events.” requires support or an example to clarify.</p> <p>I hope my comments are useful.</p>	<p>The entire paragraph has been revised and greater/more explicit detail provided to explain, The paragraph begins as follows: “During the development of CONSORT-Equity 2017, team members were found to be more engaged in particular activities in relation to their knowledge, occupational roles, and in relation to life events. For example...”</p> <p>Thank you for your patience through the review process – the comments have been very useful!</p>

VERSION 3 - REVIEW

REVIEWER	Dr Tiffany Conroy College of Nursing and Health Sciences Flinders University South Australia Australia
REVIEW RETURNED	03-Jun-2019

GENERAL COMMENTS	Thank you for the opportunity to review this paper. The paper clearly explains the process of IKT and will assist others who wish to utilise this approach. There are some minor spelling and grammatical errors however these can be corrected in the proofing stage.
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